Compiled by

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EXPLANATION

FOR LEASABLE MINERAL AND WATERPOWER LAND CLASSIFICATION MAPS

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Only the land disseffication categories present in the quadrangle are colored in the explanation and on the map; an asterisk () precading a tolored classification category in the explanation indicates that the category includes all land to the quadrangle and so, to reduce clutter, the color is omitted from the map. Categories not colored in the explanation are not present in the quadrangle. All withdrawn lands are prospectively valuable for the wineral for which they are withdrawn. Land classification applies only to public lands within category boundaries. Leasable minerals are cost, oil and gas, and oil shale; phosphates, or phosphate rock; chlorides, sulfates, carbonates, borates, and milicates or nitrates of potassium and of modium; sulfur in Louisians and New Mexico; and native asphalt, solld and semisolid bitumen, and bituminous rock (including oil-impregnated rock or sands from which oil is recoverable only by special treatment after the deposit is mined or quarried). Mowever, all minerats are leasable on Federal acquired lands and restricted allotted and tribal Indian lands. Leasable mineral outcrops are not shown. A symbol preceding a mineral name on the selected minerals list indicates the mineral is present in the map area. Active mines are not differentiated

	MDRAWN LANUS number and dat			CLASSIFIE	D LANDS	_		
	Coal		Phosphate	Coal		Phosphate		
	Oil shale		Titospinase	011 8	hale	Sodlum		
		and co.		name a	nd effecti	R COAL LEASING ve date (month-d	ay-y	
	Asphaltic mat	erials						
	Coal			KNOWN LEASING AREASShowing name and effective date (month-day-year) Note: Not all areas have been assign names				
Summing States	Geothermal re	sources						
6113	Oil and gas					structure of proges field (KGS)	dor-	
	oil shale			Known	geotherma	al resources area	(KG	
	Phosphate			Known	oli shale	: lessing area		
	Potasslum			Known	phosphate	leasing area		
	Socium			Known	potassium	n leasing area		
				Known	sodium la	easing area		
			WATERPOWER LAN	D CLASSIFICATION				

SELECTED MINERALS -- Symbol shows location of mineral occurrence to the mearest 40-acre tract; multiple occurrences of a mineral within a quarter section (160 acres; 64.75 hectares) are not differentiated from a single occurrence. For tartographic reasons mineral occurrence may be shown by a dot and a leader to the symbol in parentheses.

Arsenic	Tantaluu	Molybdenum	Titaniferous iron	
Beryllium	Copper	Nickel	Titanium	
Bismuth	Gallium	Platinum group	Tungsten Uranium	
Cadmium	Germanium	Rare earths		
Cesium and	Gold	Silver	Vanadium	
Rubidium	Iron	Selenium	Zinc	
Chromium	Lead	Tellurium	Zirconium and Hafnium	
Nonmetallics				
Abrasives	Carbon dioxide	lodine	Olivine	
Alunite	Clay, refractory	Kaglin	Quarta	
Asbestos	Diatomite	Kyanite group	Serpentine	
Barite	DumortierIte	Limestone	Silica sand	
Bentonite	Feldspar	Lithium minerals	Strontium minerals	
Borates	Fluorspar	Magnesite	Sulfur	
Bromine	Fuller's earth	Magnesium sulfate	Tale, Soapstone	
Brucite	Gen and ornamen-	Meerschaum	Vermiculite	
Calcite, optical	tal stones	Mica	Volcanic ash,	
Calcium chloride	Graphite	Mineral pigments	Pumice, Perlite	
	Gypaum	Nephelite		
	Helium			

SYMBOL COMBINATIONS -- Certain symbols (silver, lead, and zinc, or uranium and vanadium) are combined into a single symbol to show several minerals at the same locality as shown in three examples below. Where individual symbols cannot be combined into a single symbol or where cartographic reasons dictate, occurrences of several minerals at the same locality are shown by a dot at the locality and a leader to the composite symbol or

MINE OR PROSPECT WHERE MINERAL IS KNOWN -- Mine or prospect is shown by a mineral symbol at the location or by a dot at the location and a leader to the symbol or symbols in

WIDESPREAD MINERAL DOCUMENCES -- An area of numerous or widespread occurrences of one or more of snother mineral or minerals within such an articleses. An overlapping area locality and a leader to the symbol or symbols in parentheses. An overlapping area of mineral occurrence is outlined by a short dashed line.

X Mine or prospect where mineral is not known